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FACTS about POLYIMIDE FILM

1. What is polyimide?

Polyimide is a polymeric plastic material, engineered for long term performance at very high temperatures, in excess of 250° C for prolonged periods of time. It is thermally very stable, and is widely used in aerospace, electronics, and electrical industries when a high temperature material is required.

2. Why use label materials which are on polyimide film?

Because of its thermal stability, properly engineered polyimide films do not shrink or decompose at the temperatures encountered in the circuit board industry. This is particularly important for bar code symbols. Shrinkage in the label will result in distortion of the bar code symbol, which makes it unscannable.

3. Why is there color variation in polyimide film?

Polyimide is made from two key ingredients, which may each contain traces of impurities, such as water vapor, or even traces of iron from the chemical drums containing solvents used. One of the key ingredients is also sensitive to exposure to the oxygen in air, which darkens it over time. Finally, the more heat applied to polyimide films, the darker they may become. There is no color standard for polyimide films in the label industry (or for many other uses across a wide range of applications and industries). Polyonics subjects its polyimide materials to a wide range of physical tests which are the important factors influencing its suitability as a film for bar code labels. Such tests include thickness (gauge), % elongation, shrinkage at 250 °C, surface properties for coatings, thermal decomposition by DSC and TGA methods, to name but a few.

4. What effects does the color have on performance of polyimide label materials?

In summary, the color of polyimide film is influenced by a variety of factors, **NONE OF WHICH INFLUENCE PERFORMANCE OF THE FILM AS A LABEL MATERIAL.**

Polyimide label materials is our business. We carefully and continually evaluate properties of these films to maintain the highest quality standards in the industry today. We are the technology leaders in the use of polyimide chemistry and polyimide films for bar code applications.

If you have questions please feel free to contact our Technical Service Department at info@polyonics.com. If they do not satisfy you, I will personally assist you.

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